

community sustainability indicators

sustainable city report – appendix a

INTRODUCTION

discussion

The Community Sustainability Indicators provide an update on measuring the community's progress toward long-term sustainability goals. The Sustainable City Report Updates provide a more detailed look at several of the 26 indicators established by the Sustainability Sounding Board in 2009. These reports can be found on Issaquah's [Office of Sustainability](#) website. The Community Sustainability Indicators are grouped into eight primary **Sustainability Themes**:

- Basic Needs
- Business Climate
- Education
- Community Awareness and Stewardship
- Green, Compact, Mixed-Use Development
- Natural Areas & Open Space
- Transportation - Mobility
- Waste/Resource Use

The indicators are updated every one to two years though data sets vary depending upon reporting cycles for agencies or organizations which collect, validate and report underlying data. In some cases, data reporting methodologies have changed, in which case the data set may show differing periods of coverage. Since these are an appendix to the Comprehensive Plan, they can be updated every one to two years in a different process than the annual Comprehensive Plan amendments.

Basic Needs	Business Climate	Community Awareness & Stewardship	Education
Community Health	Business Diversity	Quality of Life	Extended Graduation Rate
Community Safety	Job-Housing Balance	Volunteerism	School Safety
Food Bank Use	Participation in the Arts	Voter Turnout	Advanced Placement Class Enrollment
Housing Affordability Gap	Revenue Base Diversity		

Green, Compact, Mixed-Use Development	Natural Areas & Open Space	Transportation - Mobility	Waste/Resource Use
Current and Planned Density	Preserved Natural Open Space	Carbon Footprint	Energy Use
Green Buildings	Food Grown Locally	Transportation by Type	Renewable Energy Use
Population Density	Stream Health	Walkability	Waste Generation
	Tree Canopy		Water Use

The foundational Sustainability Sounding Board Report, Measuring What Matters (2009), may be found [online](#). Five years since the Sounding Board Report, and our community has made positive progress on many of these indicators. As we move into the future, it is an important implementation strategy to set targets for these indicators and then move forward with action steps where ever possible.

BASIC NEEDS

community health

What is Community Health?

Community health measures the percentage of residents with health insurance.

Why is Community Health important?

An inability to access primary healthcare needs has sweeping impacts on public health, economic stability, education and social equity across racial and ethnic groups and income levels within a community. Rising healthcare costs and unemployment, has made this issue even more crucial. In 2009, the Sustainability Sounding Board recommended community health as one of 13 'key' indicators of sustainability for the Issaquah Community.

Issaquah's Targets and Goal

While there is no specific target for this indicator, Issaquah strives for 100% of our adult population to be insured.

How is Issaquah doing?

According to the 2010-2012 American Community Survey, 6.6% of residents in Issaquah are uninsured. 9.2% of adults ages 18-64 are uninsured, 2.0% of those under the age of 18 are uninsured and 1.2% of people 65 years and older are uninsured. The Issaquah average is below both the King County and Washington State average for this same time period.

community safety

What is Community Safety?

Community safety is defined as the reported crime rate in Issaquah.

Why is Community Safety important?

Crime affects communities in many ways, including physical safety, property damage, deterioration of communities, and allocation of public resources to the criminal justice system. A sustainable community must maintain the safety of its residents so they feel safe, supported, and secure.

Issaquah's Targets and Goal

While there is no specific target for this indicator, Issaquah strives to decrease property and violent crimes to continue its downward trend. Furthermore, Issaquah strives to ensure that community members develop a sound relationship with each other and the Issaquah Police Department, by connecting residents to community resources.

How is Issaquah doing?

In 2013, the Issaquah crime rate was 45.6 crimes per thousand persons (utilizing the NIBRS tracking methodology). This rate is fairly steady in comparison to last year. In total, there were 1,465 crimes reported in Issaquah in 2013.

food bank use

What is Food Bank Use?

Food bank use is defined as the number of individuals and families served by the Issaquah Food Bank per year.

Why is Food Bank Use important?

The use of food banks by Issaquah individuals and families is an indicator of the number of residents in need, as well as how well the community is serving the basic economic and social needs of these residents. In 2009, the Sustainability Sounding Board recommended food bank use as one of 13 'keystone' indicators for the Issaquah community.

Issaquah's Targets and Goal

While there is no specific target for this indicator, Issaquah strives to decrease the need for food bank use, while endeavoring to fill community members' basic economic and social needs through connecting residents to community resources.

How is Issaquah doing?

In 2013, the Issaquah food bank served the highest number of individuals and families since opening in 1982: 18,579. This represents an 18% increase from 2012. This change reflects both an increase in need by the community and additional outreach performed by the food bank. The age distribution of clients has remained fairly steady in recent years.

housing affordability gap

What is the Housing Affordability Gap?

The Housing Affordability Gap is defined as the difference between the price of homes affordable to median income households compared to the median price of homes on the market. Housing affordability means that 25 to 33 percent of a total household budget is spent on housing costs. The indicator also tracks the number of affordable units available as a percentage of total housing stock.

Why is housing affordability important?

According to the 2012 Business Retention Survey, Issaquah employers rank housing affordability as the number one issue to recruit and retain employees. Earning 62 percent of responses, affordable or workforce housing was named important to recruiting employees. Employers also say that long commutes result in attrition. Providing affordable housing for the Issaquah workforce will result in a jobs/housing balance necessary to support the economy – both the employers and employees.

Issaquah's Targets and Goal

Issaquah's 2013 adopted goals are:

- 17% of new housing units are affordable to moderate income households with 50-80% of King County median household income
- 24% of new housing units are affordable to low income households with incomes below 50% of the King County median household income
- Ensure that as Issaquah grows, there is no net loss in the supply of housing.

Targets for the housing affordability gap do not currently exist. The City would hope to see a downward trend in the difference between median income and median sales price as well as an upward trend in the percentage of affordable housing units available to low and moderate income residents in Issaquah.

How is Issaquah doing?

Issaquah is moving toward the target but has a ways to go to increase housing affordability for low and moderate income residents. Currently, the levels of affordable housing are below the targets.

- In 2013, 12.2% of housing was affordable to moderate income households with 50-80% of King County median household income
- In 2013, 4.8% of housing was affordable to low income households with incomes below 50% of the King County median household income.

The difference between the average home prices and the price affordable to a household earning the median income in King County increased to \$161,559 in 2013 from \$92,032 in 2012. Issaquah's housing affordability gap for the past 10 years has consistently been higher than that of King County.

BUSINESS CLIMATE

business diversity

What is Business Diversity?

Business diversity is defined as the number of businesses in Issaquah by size, employment and type.

Why is Business Diversity important?

The size, employment, type, longevity and ownership location of businesses in Issaquah are critical measures of the health of the local economy. At this time longevity and ownership location cannot be measured. A diverse business base is important because it provides a resilient economic foundation and access to a variety of products and services. Local ownership, investment and buying supports local businesses, entrepreneurial activity, local employment and connections to

community values and priorities. In 2009, the Sustainability Sounding Board recommended Business Diversity as one of 13 ‘keystone’ indicators of sustainability for the Issaquah community.

Issaquah’s Target and Goal

Targets for Business Diversity do not currently exist, however, Issaquah strives to encourage local economic vitality by promoting and encouraging a diversity of goods and services and employment opportunities within the city.

How is Issaquah doing?

The total number of businesses in Issaquah has more than doubled over the last 13 years from 829 in 2000 to 1,803 in 2013.

Employment

- Over 90% of all businesses in Issaquah are small businesses (businesses with <25 employees), which has remained relatively constant since 2000. However, between 2010 and 2013 the number of small businesses increased from 1,009 to 1,671.
- The number of large businesses (businesses with >100 employees) increased slightly from 28 to 35 during the same period.

Employment by Sector

- 64% of all employees in Issaquah are in the service sector which includes several industries such as education, health services, and professional and business services. This category employs 14,336 people and is by far the largest sector in Issaquah.
- The second largest sector is retail which currently has 14% of employment in the City or 3,089 employees. The retail sector has decreased since it peaked in 2008 with 18% of employees in Issaquah.
- The remaining sectors make up between 3-5% of employees in Issaquah.

job-housing balance

What is Job-Housing Balance?

Job-Housing Balance is the ratio of total jobs to total housing units in Issaquah.

Why is Job-Housing Balance important?

A balance between jobs and housing means that Issaquah is more evenly matched and more likely to be able to provide adequate housing for those working in Issaquah and adequate jobs for those living in Issaquah. There is a more adequate amount of housing growth to support employment growth in the City as this ratio nears 1.0. An imbalance results in longer commutes (either to homes or jobs), traffic congestion, air emissions, deterioration of physical and mental health and community strength. It is important to note that while Job-Housing Balance reflects the ratio of jobs and housing, it does not describe the affordability of housing or the wage levels of jobs in the community.

Issaquah’s Targets and Goal

Targets for Issaquah’s job-housing balance do not currently exist. The City of Issaquah works with King County and other jurisdictions to establish GMA targets for jobs and housing that seeks to create a regional or sub-regional “balance” between housing and jobs.

How is Issaquah doing?

In 2000, there were 2.9 jobs per home in Issaquah and in 2013 there were 1.52. The job-housing ratio for Issaquah is on par with the King County average, which, in 2009, was 1.36 jobs per household, compared to Issaquah's 1.34 ratio in the same year. Issaquah is moving in the right direction, but continued attention to both housing and jobs growth in concert with improvements in mobility will be required. Matching housing to the labor force will also be important as job growth increases in the City.

participation in the arts

What is Participation in the Arts?

Participation in the arts measures attendance at entertainment, cultural and art events in Issaquah.

Why is Participation in the Arts important?

Arts and culture is seen as an asset to local economic development, as many businesses and residents look to these amenities when making location decisions. Furthermore, exposure to different cultures and ideas fosters understanding between diverse community members. In 2009, the Sustainability Sounding Board recommended participation in the arts as one of 13 'keystone' indicators for the Issaquah community.

Issaquah's Targets and Goals

Targets for Participation in the Arts do not currently exist. The City of Issaquah strives to enhance Issaquah residents' quality of life through a balanced economic vitality strategy that includes diverse cultural resources. Since residents that participate in the arts are exposed to many diverse cultures, the City of Issaquah also strives to increase Issaquah residents' quality of life through increased participation in the arts.

How is Issaquah doing?

There was a slight increase in attendance in 2013 but total numbers are on par with 2011 and 2012 rates. Highlights include the Salmon Days Festival, Village Theatre, and summer events sponsored by Issaquah Parks and Recreation.

revenue base diversity

What is Revenue Base Diversity?

Revenue Base Diversity is defined as total city revenue base by source (e.g. local taxes, sales tax, utilities, business license fees, etc.).

Why is Revenue Base Diversity important?

The change in revenue base over time is seen as a core measure of the durability and breadth of the local economy. Furthermore, change in revenue also indicates Issaquah's ability to meet the needs of its residents and provide them with opportunities that may have otherwise been unavailable. These needs include investments in infrastructure, police services, parks and recreation, human services, fire and life safety, and other provisions. In 2009, the Sustainability Sounding Board recommended revenue base diversity as one of 13 'keystone' indicators of sustainability for the Issaquah community.

Issaquah's Targets and Goals

While there is no specific target, the City of Issaquah strives to encourage and maintain a robust local economy that can meet the needs of and provide opportunities to its residents. Specific targets for revenue base diversity have not been determined.

How is Issaquah doing?

- The fiscal year 2013 budget reflects a slowly improving economy and emphasizes the City's commitment to the three elements of sustainability – our people, planet and economic prosperity.
- The City's overall revenue base increased by about \$12 million in 2013 to \$54.8 from \$42.1 million in 2012. This was primarily due to an increase in impact fees related to development in the City of Issaquah.
- The City has received higher total revenues from property taxes, sales taxes, B&O taxes, licenses and permits, charges for services, fines and penalties, investment income, and rents and leases as the City has grown. Revenue has increased with population growth and helps to accommodate the needs of Issaquah's increasing population.

COMMUNITY AWARENESS AND STEWARDSHIP

quality of life

What is Quality of Life?

Quality of Life, or 'livability', is resident perception of the overall quality of life in Issaquah. This indicator is in development.

Why is Quality of Life important?

Quality of Life describes the opportunities for personal growth for Issaquah residents and Issaquah residents taking advantage of these opportunities. These opportunities can be expanded by local businesses, government, non-profits, community leaders and community members. A higher quality of life leads to many positive outcomes for residents, which include a greater sense of place within the community, better health and less stress.

Issaquah's Targets and Goal

Issaquah seeks to maintain and enhance the quality of life for all Issaquah residents by supporting programs which enhance personal and community living. These quality of life enhancement policies include:

- Supporting quality education.
- Working cooperatively with businesses and the community to support programs that contribute to Issaquah's quality of life.
- Ensuring that the government provides quality services and excellent infrastructure.
- Improving opportunities for recreational enjoyment of open space by providing a continuous network of trails, neighborhood parks and recreational facilities.
- Supporting programs that provide affordable opportunities for seniors and persons with disabilities to participate in recreational and cultural activities.

- Preserving and rehabilitating resources of historic, cultural or aesthetic significance. Issaquah does not have specific targets associated with these outcomes.

How is Issaquah doing?

This indicator is in development. The City of Issaquah plans to conduct a survey of residents that will help inform the Quality of Life indicator in future years.

volunteerism

What is Volunteerism?

Volunteerism measures the percentage of residents who volunteer and total hours volunteered in City or community programs. Because data on volunteerism is not currently available for all community programs, it is currently illustrated through hours volunteered for City or City sponsored programs.

Why is Volunteerism important?

By volunteering Issaquah residents improve the quality of life in Issaquah for themselves and others, which is fundamental to building a more sustainable community. In 2009, the Sustainability Sounding Board recommended volunteerism as one of the 13 'keystone' indicators of sustainability for the Issaquah community.

Issaquah's Targets and Goal

The City of Issaquah benefits from and supports volunteers in many of its program and service offerings within the community. A specific Volunteerism target does not currently exist.

How is Issaquah doing?

Issaquah is moving in the right direction.

- Volunteerism for City programs has increased over the last five years.
- Total volunteer hours in City programs, including recreation, stream restoration and other activities exceeded 42,000 hours in 2013, on par with 2011, but nearly 2.5 times more than just 5 years ago. Volunteer time is worth \$22.55 per hour.¹ This equates to a value of almost 1 million dollars reinvested in our community.
- Volunteers for other organizations in the community, such as religious organizations, Salmon Days, Kiwanis and Rotary, also have a significant lasting impact on the Issaquah Community. The Volunteerism data from City programs does not reflect this value, but rather suggests trends within Issaquah.

voter turnout

What is Voter Turnout?

Voter Turnout is defined as the percentage of registered voters who vote in general and local elections and the percentage of eligible voters who are registered.

¹ http://www.independentsector.org/volunteer_time?s=volunteer%20time

Issaquah's Targets and Goal

Issaquah strives to increase voter turnout in elections as well as the number of registered voters in Issaquah. No specific target exists at this time.

How is Issaquah doing?

Issaquah's Voter Turnout is similar to neighboring cities and King County. Voter turnout is cyclical in nature as more people vote in presidential election cycles. Nevertheless Issaquah maintains a strong percentage of voting citizens. In this off-cycle year (2013), 47% of those who are eligible voted.

EDUCATION

education

What is Education?

The Sustainability Sounding Board identified three key areas of sustainability that should be addressed:

1. Pre-kindergarten
2. Kindergarten through 12th grade
3. Adult education

Currently, the primary data for the Education community indicator is being tracked by the Issaquah School District through the extended graduation rate, school safety and advanced placement class enrollment and other metrics as noted below.

Why is Education Important?

The quality of education – both formal and community-based – is paramount to each individual's ability to achieve their goals and positively contribute to a sustainable society. Issaquah residents value education at all ages, and believe it is important to invest in education so that citizens feel empowered to enhance the quality of their lives and their community.

Issaquah's Targets and Goal

The Issaquah School District strives to prepare all students for the academic, occupational, personal and practical challenges of life in a dynamic global environment. While students continually rank among the best in the state and nation in assessments, schools here annually create research-based plans to challenge, support and move every student forward to higher levels of learning. Accordingly, the Issaquah School District tracks graduation rates and SAT scores as indicators of student success.

How is Issaquah Doing?

The Issaquah School District continues to excel in several areas including extended graduation rates, school safety and advanced placement class enrollment.

- The percent of graduates continuing their education increased between 2012 and 2013 from 80% to 84%. 69% of 2013 graduates are at a four-year institution; 27% are at a community college; and 4% are at a trade school.

- Average SAT scores rose by 3 points in 2014 to 1721. This exceeds both the state average of 1519 and the national average of 1497.
- Student extended graduation rates remained steady at 94.7%.
- Students that feel safe at school: 92% of sixth-graders and 89% of 10th-graders reported feeling safe at school. (Healthy Youth 2012)
- Student discipline rate: Incidents of suspension or expulsion equaled 1.42% of entire student population last school year.
- Student substance abuse rate: 0% of sixth-graders and 5% of 10th-graders reported using illegal drugs in the past 30 days; 1% of sixth-graders and 10% of 10th-graders report having drunk five or more drinks in a row in the past two weeks. (Healthy Youth 2012)
- The Percent of 11th and 12th-graders enrolled in advanced courses increased from 58.7% to 61.9%. Issaquah has been named to the AP Honor Roll three times for number of students taking and passing Advanced Placement courses. 81.7% of students passed out of all Advanced Placement tests taken.

GREEN, COMPACT, MIXED-USE DEVELOPMENT

current and planned density

What is Current and Planned Density?

Current and Planned Density is defined as achieved residential density in developable areas during periods of 6 years and the 25-year plan for density for developable areas.

Why is current and planned density important?

Current and Planned Density is seen as key to understanding how well the City of Issaquah is managing growth. Smart growth focuses development in walkable, transit supportive and traditional neighborhood and town center design. It focuses on livability and simultaneously uses infrastructure more efficiently, preserves natural open spaces, provides for more efficient transportation and promotes local economic vitality among other sustainability objectives. Higher residential densities and mixed-use buildings in key areas will promote these sustainability objectives.

Issaquah's Targets and Goal

Targets for density are an implicit part of this indicator, as it captures planned densities in developable areas for each zoning category. The current target density for Issaquah from 2006 to 2031 is:

- Housing Target is 5,750 additional units
- Job target is 20,000 additional jobs
- Higher residential densities in appropriate areas will help Issaquah achieve:
- Reductions in greenhouse gas emissions
- Lower pollution, through less vehicular travel

These appropriate areas include areas throughout Gilman, Newport, I-90 and Olde Town subareas as established in the Comprehensive Plan. The Central Issaquah Plan, adopted in December 2012, provides sustainable policies that focus density in the Central Issaquah area.

How is Issaquah doing?

Issaquah is moving in the right direction.

- In 2006, Issaquah had 9,437 housing units and built 1,834 additional units by 2012, leaving 3,916 remaining to target.
- There were 18,280 existing jobs in 2006. An additional 2,483 jobs were created from 2006 to 2012 leaving 17,517 remaining to target.
- The Central Issaquah Plan will guide the long-term evolution of the 1,100 acre commercial core from a collection of strip malls, parking lots, and office buildings into a more sustainable urban area that will meet our community's needs for environmental protection, jobs, housing and rapid transit.

green buildings

What are Green Buildings?

The Green Buildings indicator measures the number of LEED and Built Green certified buildings as a percentage of Issaquah's overall building stock.

Why are Green Buildings important?

Green Buildings use sustainable materials and green technology to reduce pollution and resource use and protect vital habitat, watersheds and natural areas throughout Issaquah.

Issaquah's Targets and Goal

Issaquah strives to increase the number of LEED certified and Built Green certified buildings to promote elements of sustainability in the natural environment by expanding sustainable building programs. A specific target for Green Buildings does not currently exist.

How is Issaquah doing?

Issaquah is moving in the right direction

- 12 LEED certified buildings have been completed since 2003, totaling almost 700,000 square feet of United States Green Building Council certified sustainable buildings. There are several more buildings in Issaquah that are currently in the process of becoming certified.
- In 2013, the City of Issaquah's percentage of Built Green certified homes is 16.7% of total housing stock, which is substantial on its own and as compared to neighboring communities.
- The City, along with a diverse set of partners, opened zHome in 2011, the nation's first zero net energy multifamily housing project.
- In 2012, two projects received national recognition through the prestigious industry ASHRAE Technology Awards, the City's Maple Street Fire Station 72 and the new Swedish Medical Center and Hospital.

population density

What is Population Density?

Population Density measures the average number of residents per acre in each subarea in Issaquah. Each subarea is categorized into three different levels, based on its population density. Level one is for subareas with less than 6 people per acre; level 2 is for subareas with greater than 6 and less than 40 people per acre; level 3 is for subareas with greater than 40 people per acre.

Why is population density important?

Population Density is a key measure to understanding how well the City of Issaquah is managing growth. Smart growth is connected to the use of resources, transportation, the local economy and other sustainability issues. In 2009, the Sustainability Sounding Board recommended Population Density as one of the 13 ‘keystone’ indicators of sustainability for the Issaquah community.

Issaquah’s Targets and Goal

Although a specific population density target has not been established, higher population density in appropriate areas will help Issaquah achieve reductions in greenhouse gas emissions and lower pollution, through less vehicular travel.

These appropriate areas include areas throughout Gilman, Newport, I-90 and Olde Town subareas as established in the Comprehensive Plan. The development of the Central Issaquah Plan provides a significant opportunity for the City to manage growth which is more sustainable and livable within the regional context.

How is Issaquah doing?

Density in Issaquah has increased in each subarea from 2009 to 2013. Issaquah Highlands is the densest subarea, followed by Greenwood Point and then Olde Town.

NATURAL AREAS AND OPEN SPACE

preserved natural open space

What is Preserved Natural and Open Space?

Preserved Natural and Open Space is defined as the percentage of acres city-wide in parks, stream and wildlife corridors and preserved natural areas.

Why is Preserved Natural and Open Space important?

As Issaquah grows and changes, it is critical that we protect its beauty and natural areas. These assets can provide habitat, recreation and essential ecological functions. In 2009, the Sustainability Sounding Board recommended Preserved Natural and Open Space as one of the 13 ‘keystone’ indicators of sustainability for the Issaquah community.

Issaquah’s Targets and Goal

Issaquah seeks to increase the percentage of acres preserved in open space, although no specific target exists.

How is Issaquah doing?

Issaquah is maintaining a significant percentage of acres of preserved open space.

- The percentage of open space has steadily increased. In 2013 the City had 166 acres of maintained parks and 1,443 acres of open space for a total of 1,609 acres.
- Approximately 21.91% of the City’s total acreage is in Preserved Natural and Open Spaces, up from 14.9% just 10 years ago.

food grown locally

What is Food Grown Locally?

Food grown locally is measured by farmer's market sales by product type.

Why is Food Grown Locally important?

A piece of produce in a typical grocery store travels over 1,500 miles on its way from farm to consumer. These significant 'food miles' result in impacts due to shipping and economically, the transfer of 'food dollars' outside of the community and away from area farmers. Supporting local food production helps ensure that the Issaquah community supports a secure regional food supply connected to northwest values and supportive of local businesses.

Issaquah's Targets and Goal

Regarding food production, Issaquah will permit small scale agriculture, horticulture and hobby farm activities to continue where existing or where such uses would not adversely impact critical areas or the character of the surrounding area. There is not a specific local food production target at this time.

How is Issaquah doing?

The Issaquah Farmer's Market product sales decreased from 2012 to 2013 partially due to a loss in nearby parking facilities. Total produce sales fell 15% from \$475,221 to \$402,651 and processed food sales dropped from \$134,864 to \$129,560. The parking garage opened in July of 2014, so sales are expected to rise again in future years.

The City of Issaquah partners with Seattle Tilth to maintain the Pickering Garden, which produces fresh, organic produce for families served by the Issaquah Food Bank. Seattle Tilth also holds classes at the Pickering Garden to teach residents and students how to do natural gardening at their own homes.

stream health

What is Stream Health?

Stream Health measures the biological condition of local streams. This is measured through a sampling of water-borne stream insects (benthic macro-invertebrate species) and evaluation of the Benthic Index of Biotic Integrity (B-IBI). The B-IBI ranges from 0 to 50, 0 being very poor and 50 being excellent. Conditions are further categorized as very poor (10-16), poor (18-26), fair (28-36), good (38-44), excellent (46-50).

Why is Stream Health important?

Healthy streams support salmon and other wildlife habitats, and reflect the overall quality of surrounding open space and forested areas as well as the impacts of development, pesticide and fertilizer use, flooding and other activities.

Issaquah's Targets and Goal

Issaquah strives to increase Stream Health, by decreasing water runoff from roads, land, parking areas, lawns and roofs. A specific target regarding stream health has not been established at this time.

How is Issaquah doing?

Issaquah's stream health has not significantly degraded over the last 10 years and has maintained "fair" to "good" B-IBI scores. Tracking the changes in the B-IBI score at a site over time can give an indication of the trend in the health of the sites. However, many of the monitoring stations have limited data, and data can vary based on sampling method and skill of samplers. The most complete sets of data are for Issaquah Creek Upstream, Issaquah Creek Downstream, East Fork Downstream and Issaquah Creek Juniper. In 2013, there was only data for Issaquah Creek Upstream and Issaquah Creek Juniper which were both in the excellent range. In comparison to the rest of the region, the water quality in Issaquah is better than many of the more urbanized areas.

tree canopy

What is Tree Canopy?

Tree Canopy is a measure of city-wide tree canopy coverage through aerial surveys.

Why is Tree Canopy important?

Trees provide many important environmental benefits including improving air quality, reducing stormwater runoff and providing natural habitats. They also have aesthetic value and are a part of Issaquah's identity.

Issaquah's Targets and Goal

In 2008, Issaquah adopted targets for Tree Canopy coverage of 51% of total land within Issaquah and no net loss of overall coverage.

How is Issaquah doing?

In 2012 the City of Issaquah established a baseline summary of the City's Urban Tree Canopy (UTC). Aerial photography classified land cover and demonstrated where it is possible to plant trees in the future in order to meet Issaquah's current tree canopy cover goal of 51%. Issaquah is comprised of 48% tree cover, 31% impervious surfaces, 17% non-forest vegetation, 4% soil and 1% water.

Compared to neighboring communities, Issaquah possesses the highest percentage of tree canopy. Previously, the city calculated the tree canopy to be 51% of the city acreage. The updated data is not considered a decrease in city canopy but instead reflects the study's increased technology sophistication.

TRANSPORTATION – MOBILITY

carbon footprint

What is a Carbon Footprint?

Carbon Footprint is a measure of the greenhouse gas pollution associated with our activities. It measures the total carbon dioxide and carbon dioxide equivalent greenhouse gas emissions produced within the Issaquah community. The indicator describes emissions by sector (i.e. transportation, residential, industrial, commercial, waste and other sources).

Why is Carbon Footprint important?

Carbon emissions are linked to climate change and associated adverse impacts to humans and natural systems. There is scientific consensus that human based actions, primarily the burning of fossil fuels for energy, but also deforestation, industrial and commercial processes are the primary driver of climate change. Changes to the climate impact our health, transportation systems, forests, coastlines, emergency management, agriculture and food and water resources – all of which are fundamentally connected to our economic and societal foundations.

Locally, climate studies at the University of Washington Climate Impacts Group identify multiple, related impacts on natural resources, human health, wildlife, water supplies, stream flows, agriculture, regional economics and other considerations. The *Washington State Integrated Climate Response Strategy* notes the following impacts associated with a two degree centigrade increase in temperatures:

- 44% decline in spring snowpack across Washington State
- 14-29% increase in the magnitude (i.e. amount of precipitation) of 24 hour storm events in the Seattle-Tacoma area
- More extreme river flooding. At a temperature increase of roughly 3°C, the 100-year flood event for the Green River near Auburn could increase in magnitude up to 76% - with a similar range projected for the Snohomish River

In 2009, the Sustainability Sounding Board recommended carbon footprint as one of 13 ‘keystone’ indicators of sustainability for the Issaquah community.

Issaquah’s Targets and Goal

Issaquah has adopted a greenhouse gas emissions reduction target of 80% by the year 2050, with a base year of 2007. King County has adopted similar targets, calling for a reduction of 25% by 2020, 50% by 2030 and 80% by 2050, with a base year of 2007. The City will be updating their targets to align with these regional targets in 2014. Washington State has adopted greenhouse gas emissions requirements, limiting emissions to 50% below 1990 levels by 2050. In addition, the City joined over 500 mayors to endorse the U.S. Conference of Mayors Climate Protection Agreement.

How is Issaquah doing?

Greenhouse gas emissions have decreased approximately 1.9% from 2007 to 2012 concurrent with a downturn in the economy over this same period of time. Historically, emissions generally have followed growth in the city as the number of residents, for example, has increased from 24,710 persons in 2007 to 31,150 persons in 2012. During this time, however, total carbon emissions per capita has declined from approximately 11.4 to 8.9 tons per person, and residential energy use per house has also declined significantly as the newer housing stock has become more energy efficient.

Issaquah is one of only a few Cities in King County with a formally adopted greenhouse gas emissions target. Several policies also are aimed at reducing Issaquah’s carbon footprint. Projects such as zHome, LED streetlight retrofits, Municipal building retrofits, electric vehicle infrastructure, waste reduction and trip reduction strategies are aimed at reducing emissions. The City is currently developing a climate and sustainability strategy as well as a bike and pedestrian master plan for the community.

Comparing 2007 and 2012 emissions:

Sector	Estimated GHG Emissions (metric tons of CO ₂ e)			
	2007	%	2012	%
Residential	81,970	29.2%	82,480	29.9%
Commercial	92,330	32.8%	93,050	33.7%
Industrial	13,870	4.9%	11,730	4.3%
Transportation	92,920	33.1%	88,630*	32.1%
Waste	n/a		n/a	
Total	281,090		275,890	

mobility

What is Transportation by Type?

Mobility measures transportation by mode, which is the percentage of total travel trips by the mode of transportation (i.e. foot, bicycle, drive alone vehicle, car/vanpool, bus, and rail). Since data is unavailable for the travel patterns of all Issaquah residents, transportation by mode trends are extrapolated using data from the Commute Trip Reduction survey that captures the commuting trends of employees of businesses with more than 100 employees.

Why is Mobility Important?

Transportation accounts for about 50% of greenhouse gas emissions in King County and the majority of those are from single occupant drivers. Reducing the number of single occupancy vehicles will reduce transportation emissions, improve air quality, and reduce traffic congestion. In 2009, the Sustainability Sounding Board recommended Mobility as one of the 13 'keystone' indicators of sustainability for the Issaquah community.

Issaquah's Targets and Goal

Reduce auto-travel and encourage alternate forms of transportation.

- 10% reduction in Single-Occupancy Vehicle travel
- 13% reduction in Vehicle Miles Traveled

How is Issaquah doing?

Issaquah has the highest vanpool mode share of any CTR affected jurisdiction in the state, but like other similar cities, it is still heavily car dependent. For businesses with more than 100 employees, the 2013/2014 survey showed that employees are continuing their dependence on personal vehicles. Drive alone rates increased from 70.5% in 2011 to 72.1% in 2013.

Vanpools and carpools continue to be popular alternative methods for commuting to work. At Costco, one of the City's largest employers, ridesharing accounts for 1 out of every 4 commute trips and removes 462 cars from the road each day. While Issaquah has not hit the targets for the drive alone goal of 10% reduction in vehicle travel from 2006 levels, teleworking has increased by over 50% since the last survey cycle. Eliminating a trip through flexible schedules or teleworking reduces the total vehicle miles traveled.

walkability

What is Walkability?

Walkability is defined as the percentage of residents who live within a walkable (generally within ¼ mile) distance of essential services (i.e. schools, retail, grocery, parks and open space, health services and public transportation).

Why is walkability important?

Walkability is influenced by a range of issues, including urban design, pedestrian, bike and transit access, business district development and mixed use housing, among others. Walkable communities are often characterized by positive improvements in public health, thriving local businesses, transportation options, and smart growth patterns which use infrastructure efficiently and preserve sensitive natural areas. In 2009, the Sustainability Sounding Board recommended Walkability as one of the 13 'keystone' indicators of sustainability for the Issaquah community.

Issaquah's Targets and Goal

Issaquah seeks to create livable housing and neighborhoods for all residents, but no specific target currently exists for Walkability.

How is Issaquah doing?

Issaquah remains largely automobile dependent, but has increased walkability to some amenities in the last 4 years including grocery stores, health services, retail and schools.

- Groceries—8% of residents live within a walkable distance of a grocery store
- Health services—10% of residents live within a walkable distance of health services
- Public transportation—36% of residents live within a walkable distance of public transportation
- Retail—37% of residents live within a walkable distance of retail
- School—24% of residents live within a walkable distance of a school
- Parks and Open Space—99% of residents live within a walkable distance of parks and open space
- Olde Town is the most walkable subarea in Issaquah followed by Gilman

WASTE/RESOURCE USE

energy use

What is Energy Use?

Energy Use is defined as total energy use per capita and by sector.

Why is Energy Use important?

Energy Use creates pollution and depletes resources. Energy conservation will ensure that the region will be able to continue to provide energy to its residents now and well into the future.

Issaquah's Targets and Goal

A specific target has not been determined. However, the City is in the process of developing a climate and energy strategy which will help to outline longer term goals for energy use efficiency and reduction of climate impact. In general, an increase in overall energy efficiency is expected to correlate with a decrease in per capita energy consumption.

How is Issaquah doing?

Total community wide energy use (natural gas and electricity) decreased by 7.5% from 2012 to 2013. Residential energy use per capita, however, had a greater reduction of 13% during the same time period. Over time, residential energy use per capita has declined significantly, which is thought to reflect newer, more efficient and Built Green housing stock as well as increased appliance efficiency standards. The amount of electricity used within each sector has remained relatively stable.

renewable energy use

What is Renewable Energy Use?

Renewable Energy Use is defined as the percentage of citywide energy use from renewable sources such as wind, geothermal and solar sources. The indicator tracks use as a percentage of total city-wide energy use, and average consumption of energy per person by different sources (e.g. hydropower, coal, natural gas, wind, etc.).

Why is renewable energy use important?

Renewable energy reduces pollution and resource use, while encouraging ongoing investment in energy sources which do not rely upon fossil fuels. Such investments help to ensure that the region will be able to continue to provide energy to its residents now and well into the future.

Issaquah's Targets and Goal

Increased purchases of renewable energy by Issaquah businesses and residents will reduce pollution and climate contributing emissions. A specific target does not currently exist, but leading communities, such as Olympia, Washington have demonstrated green power participation rates of 13% or more.

How is Issaquah doing?

- In the last 3 years, the number of households enrolled in the Green Power Program has increased by 25% for a total of 1,006 accounts in 2013.
- The percentage of households participating in the Green Power Program has nearly doubled in the last 10 years, increasing from 3.56% in 2004 to 6.4% in 2013.
- Puget Sound Energy supplies electricity to Issaquah. In 2012, 42% of fuel came from hydro, 30% from coal, and 18% from natural gas. Nuclear, wind and other fuel sources make up the remaining 10%. Coal emits the highest greenhouse gas pollution emissions per unit of energy produced.

waste generation

What is Waste Generation?

Waste Generation is defined as the total waste generated, amount land-filled and amount diverted (i.e. recycled, composted, etc.) by sector.

Why is Waste Generation Important?

Waste Generation is seen as a core measure of resource use. In 2009, the Sustainability Sounding Board recommended Waste Generation as one of the 13 ‘keystone’ indicators of sustainability for the Issaquah community.

Issaquah’s Targets and Goal

In line with the 2013 King County Comprehensive Solid Waste Management Plan, the City of Issaquah plans to decrease the total waste per capita, while increasing the recycling and composting rate for single family, multi-family and commercial customers.

King County targets were formally adopted by the City of Issaquah in 2001, and are currently updated in the 2013 King County Comprehensive Solid Waste Management Plan. Although currently not adopted, these targets include:

- Overall diversion rates to 55% by 2015 and 70% by 2020.
- Overall residential (both single family and multi-family) waste generation rates to 20.4 pounds per week per capita by 2020. This represents a 15% reduction from the disposal rate in 2007 of 24 pounds per week.
- Overall residential (both single family and multi-family) waste disposal rates to 14.2 pounds per week per capita by 2020. This represents a 15% reduction from the disposal rate in 2007 of 16.7 pounds per week per capita.

How is Issaquah doing?

Issaquah is on track to meet its goals; however the total amount of waste increased in 2013.

Total Waste

- Total (single and multifamily and commercial) waste generation in Issaquah has been decreasing since 2006. However, in 2013, there was a slight increase.

Diversion Rates

The overall 2013 diversion rate is 44.2%. Diversion rates broken down by sector are as follows:

- Single-family: 61.9%
- Multifamily: 24.8%
- Commercial: 37.1%

Per Capita Waste Generation

Per capita waste generation is currently 18.9 pounds per week per capita. This is a significant increase from 2012 when there was 14.3 pounds per week. The 2013 number is still below the City and regional target of 20.4 pound per week for 2020.

water use

What is Water Use?

Water Use is defined as total water use per capita and by sector (i.e. single family, multi-family, commercial, public property irrigation, private irrigation, public and fire) as well as water supplied by source (i.e. groundwater and regional supplies).

Why is Water Use important?

Abundant and clean water is indicative of a healthy ecosystem and essential to protect human, plant and animal health. Clean drinking water is a basic community need and resource. As Issaquah grows, the demand for water has also grown. Water is a renewable resource, and with wise management there can be enough to meet the needs of people, businesses, natural resources, and wildlife.

Issaquah's Targets and Goal

- Issaquah's Goal: Reduce water usage by conserving 6% per household by 2020 from 2010 levels, corresponding to approximately 141 gallons per equivalent residential unit or 170,000 gallons per day on an average basis. The City completed the Water System Plan and updated the water use targets in 2013.
- Cascade Water Alliance Regional Goal: Achieve a cumulative drinking water savings of 0.6 million gallons per day on an annual basis and 1.0 million gallons per day on a peak season (June - September) basis by 2020

How is Issaquah doing?

- Through implementation of the current water use efficiency program, the City has far exceeded the 2008 interim goal, saving an estimated 84,700 gallons per day on an average basis and 30,942,000 gallons per year.
- Average daily water use by residents living in single-family homes and duplexes was approximately 47.9 gallons per person per day in 2013 which is one gallon less per day than in 2012.
- As updated in the Water System Plan, water use per equivalent residential unit (ERU) has declined from approximately 209 gallons per day in 2001, to 150 gallons per day in 2010.
- Though it accounts for the highest percentage of water usage by sector (41.4% in 2013), single-family homes and duplexes has remained relatively stable as a percentage of total water use by sector in the City from 2007 to 2013. As recently as 2001, the same sector was only 31.2% of total water use.
- Issaquah is purchasing considerably more water from outside sources than 10 years ago—33.6% in 2013 (257.7 million gallons) as compared to 6.0% in 2002 (38.3 million gallons). As Issaquah continues to grow, it has increasingly shifted to regional resources to meet its needs, while reducing demands on the Issaquah Valley Aquifer.